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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,702	09/29/2003	Mathilde Benveniste	AVA04-02	6414

51038 7590 09/05/2008

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EXAMINER	
D AGOSTA, STEPHEN M	

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
09/05/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/673,702	BENVENISTE, MATHILDE	
	Examiner	Art Unit	
	Stephen M. D'Agosta	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,4,7,8,10,12-16 and 19-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *14-16 and 19-23* is/are allowed.

6)☒ Claim(s) *1,3,4,10,12 and 13* is/are rejected.

7)☒ Claim(s) *7-8* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7-15-2008 has been entered.

1. The examiner reminds the applicant that a **DOUBLE PATENTING** rejection has been put forth and agreed to (see response to first office action).

2. The applicant has amended various claims and a new rejection is found below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 4, 10 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pub. No. 2003/0198244 A1 published by Ho et al.; in view of US. Pub. No. 2002/0093953 A1 published by Naim et al.

Regarding to **claims 1 and 10** : Ho teaches a method comprising: The access point (a first station, AP 104 of Fig. 1) generates a first frame (120) as a poll signal or" requesting polling (RP) frame" and receives (receiving) one or more second frames (126) as a request reservation (RR) frames (a polling request) from one wireless station of a plurality of wireless stations (STA102 of Fig.I), that RR frame informs the time amounts (first temporal period) needed to transmit the data belonging to the indicated

traffic streams, the time interval of RPI frame (a first temporal period and temporal offset) specifies a time schedule for a plurality of expected future transmissions from AP104 in a controlled fashion (see Fig.I, 3, 0004, 0007, 0018 and 0020); and the access point 104 generates and broadcasts an RP frame 120 and duration of RPI (a polling schedule) based on the RR frame (polling request) (see Fig. 4 and 0019, 0020, 0021 lines 1-6);.

Ho also teaches: the access point may have received one or more RR frames 126 (see 1[0023)(receiving a plurality of frames for forwarding to said first station); the access point may also send another RP frame (a second temporal period and a second temporal offset) to initiate another RPI interval for more RR frames transmissions (I[0024) (the arrival times of said frames are substantially periodic as described); and the access point 104 chooses the contention window value for each RPI to optimize access by wireless stations in their RR frame transmissions (see 110025). (establishing, when the arrival times of said frames are substantially periodic), a RP frame from access point AP104 of FIG.1 defines the RPI interval (a transmission schedule) contain for transmitting RR frames from STA 102 of Fig. 1 (first station);

but fails to teach wherein the transmission of said poll and the reception of said polling request are via a shared-communications channel.

Ho does (Para #6) teaches a wireless communications network that share a medium/channel but are not simultaneous and thus avoid collisions, eg. similar to Ethernet).

Naim teaches a method allocating bandwidth resources to utilize a polling scheme where the base station polls (transmit a poll) each mobile station to learn the status of the data queue in each mobile station. This allows the base station to determine how to share the bandwidth resources among the different mobile stations. Thus, when polled the mobile station can send a response indicating whether it has data to transmit. (see 0006, 0007, 0012, 0013 and 0032).

In light of Naim, It would have been obvious to one of ordinary skill in the art to apply Naim's method in Ho's polling communication; in order to recreate the high Quality of Service (QoS) as improving throughput and reliable delivery of data.

Regarding to **claim 3 and 12**: In Ho's method further teaches transmitting a poll to a first wireless station (first station) in accordance with RPI time interval (polling schedule) as claim 1 above, **but fails to teach** wherein the transmission of said poll and the reception of said polling request are via a shared-communications channel.

Naim teaches a method allocating bandwidth resources to utilize a polling scheme where the base station polls (transmit a poll) each mobile station to learn the status of the data queue in each mobile station. This allows the base station to determine how to share the bandwidth resources among the different mobile stations. Thus, when polled the mobile station can send a response indicating whether it has data to transmit. (see I[0006, 110007, 110012, 110013 and 110032).

In light of Naim, It would have been obvious to one of ordinary skill in the art to apply Naim's method in Ho's polling communication; in order to recreate the high Quality of Service (QoS) as improving throughput and reliable delivery of data.

Regarding **to claim 4**: Ho discloses the method of claim 3, comprising an access point 104 and a plurality of wireless stations 102 link to wireless communication Application/Control Number: 10/673,702 Page 12 Art Unit: 4126 network 100 are in accordance with an IEEE 802.11 protocol (Fig. 1, US'244 ¶0016, ¶0019).

Regarding to **claim 13**: Ho discloses the method of claim 12 above wherein the transmission of said polling request, the transmission of said frame, and the reception of said poll are in accordance with an IEEE 802.21 protocol (I[0016, 110019 and 110022). 10.

Allowable Subject Matter

1. Claims 14-16 and 19-23 are allowable over the prior art.

2. Claims 7-8 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

These claims recite highly detailed designs not found in the prior art of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-272-7862. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on 571-272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen M. D'Agosta/
Primary Examiner, Art Unit 2617